

#### ABSTRACT OF THE DISCLOSURE

A proton type  $\beta$  zeolite is used as catalyst. Nitrogen oxides in the exhaust gas containing excessive oxygen is reduced/removed by making the exhaust gas contact with the catalyst under the existence of methanol and/or dimethyl ether as reducing agent. It is desirable that a  $\text{SiO}_2/\text{Al}_2\text{O}_3$  molar ratio of the proton type  $\beta$  zeolite is within 20-70. Thereby, the present catalyst has an excellent denitration performance and durability even against the exhaust gas containing sulfur oxides, and the denitration performance does not deteriorate even when the exhaust gas is at comparatively low temperature of 300-400°C.